REMARKS

The foregoing amendments have been made to correct minor typographical errors in the specification. An annotated version of the amendments is attached hereto at Tab A.

No additional fee is believed to be due in connection with this Second Preliminary Amendment. Any deficiency or additional fees that may be required are hereby authorized to be charged to our Deposit Account No. 20-0778.

Respectfully submitted ,

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Annotated Version of the Specification

The paragraph on page 1, line 21 to line 8 of page 2, has been amended as follows:

In a digital subscriber line (DSL) communication system, data is transmitted from a CO to a CP via a transmission line, such as a two-wire twisted pair, and is transmitted from the CP to the CO as well, either simultaneously or in different communication sessions. The same transmission line might be utilized for data transfer by both sites or the transmission to and from the CO might occur on two separate lines. In this regard reference is now directed to FIG. 1, which illustrates a prior art xDSL communication system 1. Specifically, FIG. 1 illustrates communication between a central office (CO) 10 and a customer premise (CP) 20 by way of twisted-pair telephone line 30. While the CP 20 may be a single dwelling residence, a small business, or other entity, it is generally characterized as having plain [plaint] old telephone system (POTS) equipment, such as a telephone 22, a public switched telephone network (PSTN) modem 25, a facsimile machine (not shown), *etc.* The CP 20 may also include an xDSL communication device, such as an xDSL modem 23 that may permit a computer 24 to communicate with one or more remote networks via the CO 10. When a xDSL service is provided, a POTS filter 21 might be interposed between the POTS equipment 22 and the twisted-pair telephone line 30. As is known, the POTS filter 21 includes a low-pass filter having a cut-off frequency of approximately 4 kilohertz to 10 kilohertz, in order to filter high frequency transmissions from the xDSL communication device 23 and to protect the POTS equipment.

The paragraph on page 1, line 21 to line 8 of page 2, has been amended as follows:

Looking back to the conventional line driver architecture illustrated in FIG. 3, the line driver 47 produces peak differential voltages of $2VO$. The line impedance Z_l 82 is equal to $2R_t$ and half of the transmit signal may be applied across the primary of the transformer 80. In addition, the primary of the transformer 80 may see the receive signal making the total voltage at the input to the load **100 *VO +VR*** [100 $VO+VR$] at one terminal of the primary of the transformer 80 and $-VO-VR$ at the other terminal. The hybrid network represents a scaled version of the transmission line load 100 and the same response from the line driver 47 is realized across nZ_l 84. The output of the hybrid amplifier 90 is simply the difference between the two voltage sums as outlined in FIG. 3 and restated in the equation below.

The paragraph on page 17, line 21 to line 4 of page 18, has been amended as follows:

By combining the integrated back-matching resistors 70, 72 of the first preferred embodiment with the switched source followers M12 104, M13 106, M22 112, and M23 114 introduced in the second embodiment, the improved line driver output stage of the third embodiment can support a supply voltage of 8/3 times larger than the nominal maximum supply voltage for the semiconductor technology. As a result, the improved output stage of a CMOS line driver 500 may support a maximum supply voltage of 40/3 Volts. This yields roughly an 8.5 dB increase in the maximum power with the same maximum current and saturation voltages as seen by each of the semiconductor devices 102, 104, 106, 108, 110, 112, 114, and 116. It should also be noted that reducing the maximum gate-to-source voltage for the output device may enable the designer to use shorter channel devices, as line driver output drivers then would otherwise be possible. Typically, the minimum channel length for integrated output devices is kept above [below] the minimum value of the technology due to electrostatic discharge (ESD) and "hot" electron effect limitations.